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December 9, 1998

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Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In re Matter of the Pay Telephone Reclassification and
Compensation Provisions of the Telecommunications Act
of 1996, CC Docket No. 96-128

Dear Ms. Salas:

The RBOC/GTE/SNET Payphone Coalition submits the attached Declaration by Professor Jerry A. Hausman to rebut the analysis prepared on behalf of MCI WorldCom by George S. Ford, filed November 17, 1998.

The Coalition questions the propriety of MCI's eleventh-hour attempt to add Dr. Ford's declaration to the record of this proceeding. None of the arguments that Dr. Ford makes were unavailable to him when the Commission called for comments back in June. By adding such material to the record so late in the process, MCI seems more intent on distorting the record than on providing any genuine assistance to the Commission in writing its order.

The Commission would be well within its rights explicitly to disregard MCI's arguments as untimely. That said, nothing in Dr. Ford's analysis poses any challenge to the Commission's conclusions that the payphone market is effectively competitive, that the local coin price reflects costs, and that the avoided cost approach to setting the per-call compensation default rate

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is economically justified. Indeed, it would appear that all parties have effectively conceded the theoretical validity of the avoided cost approach.

Many of Dr. Ford's arguments are old wine; nor is the bottle particularly new. His claims about locational monopoly and consumer information have been refuted repeatedly; he does not and cannot respond to that record evidence. For the convenience of the Commission, however, and to address empirical information added to the record, the Coalition has asked Professor Hausman to explain once again why Dr. Ford's claims are wrong as a matter of economic theory and empirical fact.

Professor Hausman demonstrates that Dr. Ford's claim that imperfect competition in the payphone market has created a gap between price and cost is wrong. Almost all markets in the United States are imperfectly competitive because they are characterized by significant fixed costs. This does not mean that monopoly profits are being earned in such markets.

Dr. Ford's claim that spatial differentiation leads to monopoly profits in the payphone industry is incorrect. Professor Hausman explains that Dr. Ford's market definition – and his claim that search costs for alternative payphones preclude competition – are wrong. Indeed, both claims have been repeatedly refuted by evidence in the record that Dr. Ford ignores. Similarly, Dr. Ford's claim that imperfect information hampers competition in the payphone market has been thoroughly discredited. Dr. Ford argues that there are significant barriers to entry to the payphone market, both because locations are limited and because there are significant sunk costs. Once again, Professor Hausman shows that these arguments ignore record evidence and are empirically baseless.

Professor Hausman demonstrates that the relative uniformity of prices in the payphone market shows that prices are set by the competitive market. Dr. Ford's contrary argument ignores not only the fact that different payphone locations have different costs, but also that different locations have different

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elasticities of demand. Under those circumstances, and in the absence of a "grand cartel," a uniform price demonstrates that price is set by a competitive market. In addition, Professor Hausman explains that Dr. Ford's arguments concerning location rents make no economic sense: higher commissions at desirable locations represent higher compensation for more valuable assets.

Finally, Dr. Hausman emphasizes that consistent evidence concerning the price elasticity of demand for local coin calling conclusively demonstrates that the payphone market is competitive. Dr. Ford never even addresses this evidence.

If you have any questions concerning this matter, please contact me at (202) 326-7902.

Sincerely,

A handwritten signature in cursive script that reads "Michael K Kellogg".

Michael K. Kellogg

cc: Lawrence Strickling
Dorothy Attwood
Craig Stroup
Don Stockdale
Glenn Reynolds
Bill Rogerson

Paul Gallant
Thomas Power
James Casserly
Kyle Dixon
Kevin Martin

Declaration of Professor Jerry A. Hausman

I, Jerry A. Hausman, do hereby declare as follows:

1. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139. I submitted previous declarations in this proceeding dated August 25, 1997, November 18, 1997, July 13, 1998, and October 1, 1998.

2. In this declaration I reply to the affidavit of Dr. George Ford, submitted November 17, 1998. Dr. Ford attempts to refute the well documented evidence that, since competition maintains a market price for local coin calls that reflects price, the Commission's avoided cost methodology is an appropriate, market-based approach to setting the price of certain coinless calls. His arguments, many of which have been refuted previously, are wrong. His attempted economic analysis contains numerous mistakes.

I. Imperfect Competition is the Usual State of Competition in the U.S. Economy

3. Dr. Ford attempts to claim that because imperfect competition exists in the payphone industry, a gap may exist between price and cost. (p. 6) His claim is tantamount to the suggestion that if perfect competition is not present, a market-determined price will not reflect costs. Dr. Ford is incorrect, as almost all economic textbooks discuss. Imperfect competition occurs when fixed costs of production are significant, which is the normal state of technology in 99% of all competitive markets. As the most famous introductory economics textbook discusses:

“Remember how strict this definition of perfect competition is. Think of any commodity that comes to mind: razor blades, toothpaste, steel, aluminum, potatoes, wheat, cigarettes, tobacco, computers, or cotton. Which will fit in with our strict definition?... When you go down the above list, you will find that only potatoes, tobacco, wheat, and cotton come within our strict definition of perfect

competition.” (P.A. Samuelson and W.D. Nordhaus, Economics, 12th ed., McGraw-Hill, 1985, p. 503)

Thus, apart from agricultural commodities, perfect competition does not occur in U.S. markets, as Prof. Samuelson and almost all economists have long realized. Prof. Samuelson and Prof. Nordhaus put it concisely: “This species (perfect competition) thrives mainly on farms.” (op. cit. p. 530)

4. However, the fact that these non-agricultural markets are imperfectly competitive does not mean that it is appropriate to use cost-based regulation to set prices, as MCI and AT&T have advocated in this proceeding. Indeed, the most famous economic model of imperfect competition with free entry has firms earning normal risk adjusted returns. It is true that with imperfect competition, price cannot equal marginal cost because of the significant fixed costs; however, as I explained in my July 13, 1998 affidavit:

“The basic rule of economics is that in a[n imperfectly] competitive market price equals average cost with no supra-normal (economic) profits being present. This outcome occurs because in a market situation with fixed costs and free entry, competition among similar firms will proceed to the point where the markup term is just high enough to cover the firms’ fixed costs including a normal risk adjusted return to capital. No supra-normal profit above this amount will exist, because if the price is so high as to lead to a supra-normal profit sufficient new entry will cause the price to decrease and the return to decrease to normal levels.” (July 13, 1998, ¶ 6)

Thus, the competitive outcome under imperfect competition has firms earning no monopoly profits. Firms earn a normal rate of return, and regulation cannot improve matters since price equals cost. Only where monopoly profits exist can regulation potentially improve upon the market outcome.

A. Spatial Differentiation

5. As his first source of potential monopoly profits, Dr. Ford considers spatial differentiation. (pp. 6-7) He contrasts the payphone market to the world wheat market. The comparison proves nothing: as discussed, agricultural markets are the exception of perfect competition, not the usual situation of imperfect competition. Furthermore, Dr. Ford is incorrect that with product differentiation, the direct link between price and cost is broken. (p. 7) As discussed above, in imperfect competition, price does equal cost when the fixed costs of production are included in the definition of cost, as they should be.¹ Under Dr. Ford's incorrect analysis, producers of all products where differentiation exists – e.g., yogurt, beer, ball point pens, wireless (cellular) telephone – would earn non-competitive monopoly profits. Of course, the market outcomes for these products are competitive and firms do not earn monopoly profits.

6. Dr. Ford's attempted market definition (p. 7) using the Merger Guidelines ("MG") is also incorrect. He fails to take into account that his "5 cent circle" overlaps with other "5 cent circles" and thus the market encompasses a wide geographic range of payphones. To illustrate, a gasoline station would not have a high degree of substitution with another gasoline station located across town. However, economists consider all gasoline stations located in a metropolitan area to be in the same market because gasoline stations located in between the two gasoline stations in question link the two together. The same situation exists in product markets with differentiated products: an inexpensive beer sold at half the price of an expensive beer would not have a high degree of substitution, i.e., a high cross price elasticity. However, courts typically find that all beer is in the same market because the beers that have prices in between the low price and high price beers link together the different brands.² Similarly, courts have typically found all automobiles to be in the same market even though a Neon is not a close substitute for a BMW. Economic analysis must consider the interaction between all

¹ Price does not equal marginal cost, but it cannot or firms would go out of business because they would not be covering their fixed costs.

² I apply economic analysis to this situation in J. Hausman et. al. "Competitive Analysis with Differentiated Products," Annales, D'Economie et de Statistique 34, 1994

substitute products in performing a market definition analysis, and Dr. Ford has failed to do so.

7. Dr. Ford's claim that monopoly power arises because search costs for alternative payphones would be too high has been previously refuted by Prof. Kahn (July 27, 1998, p. 6) and by my previous declaration (October 1, 1998, ¶¶ 8-9). Under Dr. Ford's approach, we would expect to see differing payphone prices depending on the degree of monopoly power in a given situation, but instead we find prices to be quite uniform with most payphone prices at 35 cents. Only if PSPs could discriminate between informed and uninformed, discretionary and emergency callers could "buyer ignorance" lead to monopoly profits. However, no means exists for this type of price discrimination, nor is it observed in the market.³

8. Dr. Ford's analysis goes wrong because he treats the one-time use of a payphone as an isolated transaction. However, many consumers have used a payphone in the vicinity before and they will do so again. Thus, they would know if prices were above the market outcome and a sufficient number would shift to a different payphone to make a monopoly price impossible to sustain. Significantly, only a relatively small proportion need to shift to make an attempted price increase unprofitable.

9. Dr. Ford admits that 30% of payphones are within sight of other payphones (p. 7). As I demonstrate in my paper "Market Definition Under Price Discrimination" (Antitrust Law Journal, Vol. 64, 1996), in a market with significant fixed costs, such as the market for payphones, only a relatively small proportion – around 10% of consumers – need to shift to make attempted price discrimination unprofitable. Because consumers are well aware of the prevailing market price of a payphone call, and because consumers also know that at least in many circumstances there are likely to be alternative payphones nearby, an attempted 5 cent increase in price of a local call would indeed be expected to

³ For a further discussion regarding the extremely high degree of difficulty of this type of price discrimination see J. Hausman et. al. "Market Definition Under Price Discrimination," Antitrust Law Journal, Vol. 64, 1996.

be unprofitable. Otherwise, MCI could presumably have presented evidence of price increases that exploit monopoly power. They have not done so.

10. Instead, the elasticity evidence that I have submitted demonstrates that the market is competitive. (Hausman, October 1, 1998, ¶¶ 11-12) I have found the price elasticity of local payphone use to be approximately -0.65 using samples of states from both the Western U.S. and the Eastern U.S. Indeed, given the proportion of fixed costs previously found by the Commission, this elasticity is over 4 times lower than what would be expected under monopoly provision of payphones.⁴ MCI has not put forward any evidence to refute these findings, and their only submission on the subject finds an even lower elasticity than I estimated.⁵ Given that my own and MCI's estimated price elasticities of less than 1.0 (in magnitude) demonstrate an absence of monopoly power, as all economics textbooks agree, the data demonstrate that the payphone market is competitive given the relatively low price elasticity that I estimated.

B. Incomplete Information

11. Dr. Ford claims that there is “[a] glaring lack of information on behalf of [payphones] consumers.” (p. 7) He goes on to claim that “prices must be known at all payphone sites that might be considered in the same market.” (p. 8) This claim is absurd. Dr. Ford is stating that all consumers must know the prices at all gasoline stations within a market, e.g., the Boston metro area, for competition in retail gasoline to work. Wide agreement exists among economists that retail gasoline markets are highly competitive, yet I doubt whether a person exists who knows all prices at every gasoline station around Boston. A similar situation exists regarding milk sold in supermarkets—no consumer needs to know the price of milk in all supermarkets to keep them competitive.

⁴ Data in the FCC's Second Report and Order indicate that capital costs constitute about 33% of the costs of calls. See Second Report and Order, ¶¶ 53, 108. Thus, Prof. Baumol in his latest reply to me (November 12, 1998, pp. 3-4) has once again disregarded the empirical evidence. His statement that he did not claim that PSPs are “pure monopolists” misses the point that the estimated elasticity of approximately -0.65 is very far below what would be expected under monopoly provision, given the proportion of fixed costs that the Commission found. The estimated elasticity demonstrates a high degree of competition.

⁵ MCI previously submitted a study by the “E Group” which estimated an elasticity of demand for payphones of -0.31 , an estimate even further away from the 1.0 standard for monopoly pricing than my estimates.

Consumers do not need this degree of information to keep markets competitive. They only need to compare the price of a given gas station with nearby gas or the price of milk in nearby supermarkets and the overlapping comparisons will keep prices competitive. Furthermore, most customers need not do any comparison at all, because marginal customers will keep prices competitive, given the impossibility of price discrimination.

12. I discussed these basic economic points in my earlier declaration (October 1, 1998, ¶ 9). Marginal customers will discipline the pricing behavior of the PSPs, because price discrimination that targets infra-marginal customers is impossible with payphones. Thus, the presence of a near uniform price and customer knowledge of the prevailing payphone price demonstrate the presence of competition in payphone provision. Dr. Ford's claim that consumers are unable "to make meaningful price comparisons across multiple payphone sites" (p. 8) contradicts ordinary experience and the empirical evidence.

C. Entry Barriers

13. Dr. Ford claims two alleged barriers to entry: the need to find an appropriate location and high fixed costs. (pp. 8-9) The first claim depends on the claim that each payphone site is a separate market. As I discussed above, this claim is wrong. Dr. Ford offers no evidence that there is a shortage of appropriate locations for competitive payphones. Indeed, data in the record from Dr. Haring and Dr. Rohlfe (July 27, 1998, pp. 6-7) demonstrate that many competitive locations exist and a rapid competitive response to above-competitive prices would occur. Haring and Rohlfe point out that the number of pay stations has grown by 30% or 300,000 payphones since competitive entry has been allowed in the payphone industry, which demonstrates that no shortage of appropriate locations exists. (July 13, 1998, ¶ 8)

14. The second argument of Dr. Ford that fixed costs are barriers to entry is wrong as a matter of economics. Even when he extends the analysis to sunk costs (p. 9), Dr. Ford is incorrect because he has not taken account the market fact of entry that Haring and Rohlfe describe. Rapid entry has occurred as Haring and Rohlfe discuss:

"Literally thousands of competing firms have entered the industry since competition has been permitted." (July 13, 1998, ¶ 13) Market data demonstrate that barriers to entry are very low because significant entry has occurred. Dr. Ford is incorrect to claim that barriers to entry are significant.

D. Dial-Around as a Substitute for Local Coin Calls

15. Dr. Ford suggests that IXC customers should be able to make local calls on a payphone at a lower price using a calling card than by depositing coins. (p. 10) This argument makes no economic sense; MCI is basically asking for a subsidy from PSPs. Why should the PSP provide service to MCI at a lower price (taking into account avoided costs) than to the individual caller? So long as the avoided costs are calculated correctly and the market is competitive, as I discussed in my earlier declarations (e.g., October 1, 1998, ¶ 3) and as Prof. Baumol for AT&T has agreed, the avoided cost approach provides the correct rate for IXCs. Moreover, as MCI admits, the cost of local calling card calls is many times the cost of a local coin call; IXCs typically charge about 75 cents or more for a local call made with a calling card. Presumably, dial-around could become a substitute for local coin call if the IXCs were given a subsidy. Similarly, wireless calls could become a substitute for local coin calls if the government gave them a subsidy. However, no economic or policy reason exists to give either possible substitute a subsidy so that they can compete more closely with local coin calls.

II. Monopoly and Locational Rents

16. Dr. Ford claims that commissions paid to location owners are "excessive" and that this result demonstrates the lack of price competition in the industry. (p. 11) Dr. Ford and MCI concede that PSPs earn no supra-normal profits. They agree that any rents go to the location provider. Yet Dr. Ford and MCI never present any data to show that PSPs pay above-market compensation for the space that they utilize. Furthermore, Dr. Ford's attempt at economic analysis makes an elementary mistake. He does a "monopoly analysis" and states because marginal cost is not expected to vary much by location, he would expect to see two monopolists charge identical prices. (p. 12) Dr. Ford's mistake is that he only considers marginal cost, and he forgets to consider marginal revenue

which depends on demand (price) elasticities which will differ across payphone locations. Let us return to Prof. Samuelson's introductory text:

“Maximum-profit equilibrium is just where marginal revenue equal marginal cost.” (op. cit., p. 515)

Since marginal revenue depends directly on a given location's price elasticity, the expected monopoly outcome is for prices to vary across locations, even if marginal costs were identical across locations because price elasticities will vary across locations, as I discussed in my earlier declaration. (October 1, 1998, ¶ 8) It is certainly the case – as all parties agree – that the price elasticity at an airport would be significantly less than for a bodega in New York City where neighboring stores also offer payphone service. A correct application of the monopoly pricing model (used by Dr. Ford) would then have payphone prices significantly higher at airports than at other locations, a result that is explicitly contradicted by the payphone price data. Thus, unless one assumes a grand conspiracy among all PSPs, which would be nearly impossible, a monopoly outcome would lead to widely different prices across locations, which even Dr. Ford admits is not the observed outcome. (p. 12)⁶

A. The Claim that Uniform Coin Rates Reflect Monopoly, Not Competition

17. Prof. Kahn (July 27, 1988, p. 8) and I (October 1, 1988, ¶ 9) have discussed why the general uniformity in the price charged for local coin calls demonstrates that the price for payphone services is set by the competitive market, such that individual PSPs are price takers. Dr. Ford incorrectly attempts to turn this argument around by claiming that if each payphone site were a monopoly, all payphones would have similar marginal costs and similar prices. The argument is incorrect because costs will vary across different sites; this fact, along with differences in demand elasticities (and corresponding

⁶ Prof. Baumol in his most recent submission (November 12, 1998, pp. 4-5) realizes that near uniform prices typically occur with competition, not with monopoly. Since he has no economic explanation for the observed data, he reverts to cultural anthropology: “For example, prices can be driven toward uniformity by a tradition that evolved under a previous regulatory regime.” (p. 5) Modern profit maximizing firms do not depend on tradition; instead, they hire managers who set prices to achieve maximum profits. If

differences in marginal revenue at different sites), means that if the payphone market were characterized by monopoly providers, the expected outcome would be a wide variation in prices. This outcome is not observed; MCI presents no evidence of wide price variation. As Prof. Baumol for AT&T realized, if a grand “cartel or some other collusive arrangement” (Baumol, p. 6) existed, a uniform price outcome under a monopoly outcome might be possible. But the outcome would be quite unlikely given the millions of locations for payphones in the U.S. Dr. Ford never claims that a “cartel or some other collusive arrangement” exists—he claims that each location acts like an independent monopolist. Thus, MCI’s and AT&T’s attempts to argue that the payphone market is non-competitive directly contradict each other.

B. Local Coin Rates Across Locations

18. Dr. Ford attempts to set up a “straw man,” comparing perfect competition with the market for payphones. (p. 13) He lists the conditions that apply to perfect competition – e.g., a centralized market, no product differentiation, and perfect information for consumers – that do not exist for payphones. Dr. Ford fails to realize (back to Prof. Samuelson’s introductory textbook) that imperfectly competitive markets reach competitive outcomes. Again, take retail gasoline markets or supermarkets – they meet none of the characteristics given by Dr. Ford, yet wide agreement exists that they are very competitive. Dr. Ford attempts to make the astounding claim that if a market is not perfectly competitive, it is not competitive! The imperfect competition “revolution” – beginning in the 1930’s with Joan Robinson – long ago demonstrated this claim to be wrong. Otherwise, apart from agricultural markets, no competitive markets would exist in the U.S., but instead all firms (except farmers) would be earning monopoly profits. The actual outcomes could not be at wider variance with Dr. Ford’s claim of a “world of monopolies.” Indeed, the estimated price elasticity of approximately -0.65 would only occur with a high degree of competition.⁷

competition did not exist, we would expect to see a wide variation in PSP prices because of the different economic situations of different payphone locations.

19. Dr. Ford agrees that \$0.35 is the most common rate across states. (p. 13) Dr. Ford does not claim that the data demonstrate that the payphone market is monopolistic; instead, he claims that the data raise questions about whether the cost of a coin call is \$0.35. His interpretation of the data is hard to fathom. The largest number of payphones by far charge \$0.35, either for a call of unlimited duration, or for a set increment of time. While some experimentation appears to exist among PSPs, the vast majority are apparently simply taking the market price.⁸ Indeed, the fact that the average price of a 5 minute local call is \$0.40 suggests that the \$0.35 rate used by the Commission is a conservative benchmark. Nothing in the record suggests that \$0.35 is above cost, and a higher price for longer calls (above \$0.35) reflects the increased cost for these calls.

C. Opportunity Costs and Ricardian Rents

20. Dr. Ford disputes that there is an opportunity cost to using a given space for a payphone, but his suggestion that space is “rarely” so “limited” (p. 14) that a location owner wants to make optimal use of it makes no economic sense. According to Dr. Ford’s reasoning building owners should receive no rent for kiosks, fast food counters, and other retail activities found near payphones because space is not “limited”. But market evidence contradicts Dr. Ford’s theory.⁹

21. Dr. Ford disputes that location rents are payments to landlords for having more productive locations for payphone calls, as Prof. Kahn (July 27, 1998, pp. 3-4) and I (October 1, 1998, ¶¶ 6-7) previously explained in our declarations. The model to which Prof. Kahn and I refer explains why commissions are higher at some locations than at other locations – that is, landlords are more highly compensated for more valuable assets. Dr. Ford’s objections are again that the markets are not perfectly competitive (p. 15): no

⁷ The relatively low estimated elasticity for coin calls of -0.65 compared to the proportion of fixed costs demonstrates that the market outcome is very far from monopoly because the estimated elasticity would only be found with a high degree of competition.

⁸ This outcome is different in New York and Rhode Island where regulatory commitments have caused the price to remain at \$0.25 for a longer period of time.

⁹ Dr. Ford’s use of a \$13 per month average for 10 square feet of retail space is rather silly, because payphones are usually put in high traffic volume locations which would rent at a premium. Dr. Ford’s use of this number assumes that payphones are randomly distributed among retail locations, an assumption that is contrary to empirical fact.

central market clearing process exists as in perfect competition, each unit of production is too small to affect the market price, and payphone locations are differentiated by traffic volumes.¹⁰ But Dr. Ford fails to realize that David Ricardo did his economic research in the early 19th century, when only the perfectly competitive model and monopoly model were known; the imperfect competition revolution began only in the 1930's. However, the Ricardian model can also be used in imperfectly competitive situations. Recall the example of retail gas stations or supermarkets with no central market clearing process and differentiation by traffic volumes. The price of gasoline is approximately the same within a market, and high volume locations on a busy corner earn higher Ricardian rents. Similarly, prices for milk and other products are similar across supermarkets, but more desirable locations earn higher Ricardian rents. Yet again, the retail gasoline market and the supermarket industry are highly competitive even though they are imperfectly (not perfectly) competitive.

22. Dr. Ford's last attempted argument is that because payphone markets are very small geographically, competitive land markets cannot explain the location rents. (p. 16) He again is incorrect, because as I explained above, payphone markets have much greater geographic scope because of overlapping circles of substitution. The price of cola in a hotel mini-bar, used by Dr. Ford, is hardly an appropriate analogy. High cola prices in a hotel room are a form of price discrimination since the same cola is available in a machine in the lobby for a significantly lower price. But, as I explained before, PSPs cannot price discriminate. Again, if marginal payphone customers have information about the price of competitive payphones, the market will remain competitive absent price discrimination. Dr. Ford has provided no evidence of price discrimination.¹¹

¹⁰ I have previously replied to this last objection in my earlier declaration (October 1, 1998, ¶ 10). An attempted price decrease will cause other nearby payphone providers to decrease their prices and given the overall market elasticity of payphones being less than one (in magnitude), the price cutter will lose revenue and also have greater costs. Thus, the incremental profit from the payphone will decrease. Unless a cartel forms, which is extremely unlikely, competition will keep prices the same except in exceptional locations where no nearby competition exists.

¹¹ Dr. Ford attempts to use the example of spatially isolated retail gas station as an example of spatial monopoly power (p. 16, fn. 26) However, except for spatially isolated gas stations, retail gasoline is highly competitive as I discussed above, even though it is imperfectly competitive. As I stated in my earlier

III. The New York and Rhode Island Experience

23. Bell Atlantic, because of regulatory conditions, does not charge more than \$0.25 for the first increment of time for a local coin call in New York and Rhode Island. Thus, the coin rates in these states are below the competitive level, unless cost or demand conditions vary markedly in these states compared to neighboring states such as Pennsylvania and Massachusetts.¹² Neither Dr. Ford nor MCI gives any data to suggest that cost or demand conditions vary markedly in either New York or Rhode Island, compared to neighboring states. Thus, one would expect that independent PSPs would attempt to charge a higher price for longer calls to reach the competitive price. This outcome is indeed what Dr. Ford finds in the data (p. 17). Even so, the Rhode Island data demonstrate that 68% of independent PSPs charge the competitive rate of \$0.35 or less for the first minute (or the entire call); over half charge \$.25 for the first increment of use. However, some PSPs charge a higher rate for additional minutes (22.7%) to attempt to increase their average price above the below-competitive \$0.25 price. Artificial constraints which holds price below competitive levels often leads to this type of outcome where competitive market forces do their best to overcome non-competitive prices.¹³

24. In New York, every PSP in Dr. Ford's sample charges \$0.25 for a call of 3 minutes or less. Thus, in New York, no independent PSPs are exercising any monopoly power; rather, they are all constrained by the prevailing price of \$0.25. Dr. Ford's "explanation" of this finding is that the \$0.25 prevailing price in New York may still be a monopoly price even though it is considered a "low price." He gives no evidence to support this assertion. His conclusion must be that the New York PUC is allowing Bell Atlantic to charge a monopoly price for payphones. Yet we know that no state has petitioned the Commission for redress on \$0.35 coin rates that exceed the New York rates

declaration, spatially isolated payphones such as at truck stops might create a similar problem (July 13, 1998, ¶ 22), but apart from these isolated situations payphone markets lead to a competitive outcome.

¹² Dr. Ford's own data demonstrates that 78.6% of payphones in other states charged \$0.35 for a coin call.

¹³ This outcome holds also when regulation sets prices too high. In the pre-deregulation day of airline fares when they were set too high, airlines competed away the excess prices through better meals, free bars, and other amenities in coach, which have long since disappeared under deregulation.

by 40%. Thus, Dr. Ford's conclusion that on "the simple empirical test of competition, the evidence is mixed" (p. 17) is wrong: the data from New York, put forward by Dr. Ford, is inconsistent with the existence of monopoly power.¹⁴


25. Moreover, we know that the price elasticity data that I discussed in my first declaration (August 25, 1997) and my most recent declaration (October 1, 1998, ¶ 12) demonstrate conclusively that the price elasticity of coin calls is significantly below 1.0 in magnitude, which demonstrates the absence of monopoly power. The elasticity evidence is not "mixed". I have estimated price elasticities from each of 14 states, and each state has an elasticity far below 1.0 in magnitude. Thus, the data from price changes in each of these 14 states demonstrates an absence of monopoly power. The demand data are inconsistent with spatial monopoly, a finding which Dr. Ford is never able to answer. He instead states that the empirical facts are consistent with spatial monopoly (p. 18), but he never once mentions the elasticity estimates, which are inconsistent with his claim of spatial monopoly.

IV. Conclusions

26. Dr. Ford wants to draw the conclusion that payphone markets are not perfectly competitive. I agree. However, Dr. Ford does not understand that 99% of all real world markets, apart from agricultural markets, are imperfectly competitive (see Prof. Samuelson's textbook). Yet almost all of these imperfectly competitive markets do not lead to monopoly profits or prices above competitive levels. Competition among firms holds returns down to the normal risk adjusted level. Thus, prices are determined by cost, including the fixed costs of equipment. Both prices and returns to investment are at competitive levels in these imperfectly competitive markets. Dr. Ford has produced no data that demonstrate monopoly returns in the payphone industry.

¹⁴ Dr. Ford's discussion of why payphones in Wisconsin do not compete with payphones in New York (p. 18) makes no economic sense. Supermarkets in Wisconsin do not compete with supermarkets in New York, nor do retail gasoline stations. For instance, different taxes on gasoline in different states demonstrate this conclusion. Nevertheless, markets for these products extend across a given metropolitan area. No economist claims that retail gasoline in Connecticut is not competitive because the price is higher than in neighboring Massachusetts due to higher gasoline taxes in Connecticut.

27. To the contrary, I have provided two sets of elasticity studies that demonstrate that the price elasticity is lower (in magnitude) than spatial monopoly outcomes would cause. Also, I have demonstrated that a spatial monopoly outcome would lead to widely differing prices across locations, while a competitive outcome would lead to approximately uniform prices. The market outcome is consistent with the competitive outcomes as Dr. Ford agrees that payphone prices are approximately uniform. His attempt to demonstrate that spatial monopoly can lead to uniform prices is incorrect because he has failed to take into account difference in demand elasticities, which would lead to different spatial monopoly prices. The only monopoly outcome that can lead to an approximately uniform price is a grand cartel among all payphone providers. But this outcome is highly implausible (and perhaps almost impossible) given the thousands of PSPs, millions of payphone locations, and absence of barriers to entry. Thus, the correct conclusion to draw, based on the data, relatively low estimated demand elasticities, and economic analysis, is that payphone markets are competitive.

 8 December 1988
Jerry A. Hausman